present no more than eight claims total. (Skoultchi Claim 105 and 106 stand in a genus/species relationship, and correspond to only one of the eight characterizations advanced by Chappel in Interference 103,737). This should not be taken as a disclaimer of subject matter that could be claimed given an opportunity for Cell Genesys to present additional claims. Specifically, Chappel identified as many as 8 separate "Counts" that it argued were patentably distinct. In redeclaring that interference as Interference 103,737, the APJ noted that he was not in Agreement with this characterization, declaring the Interference with but a single Count, reciting ARS Claims 2 or 3, in the alternative. The APJ also directed Cell Genesys to present claims corresponding to as many of the alternatives identified by ARS as possible.

On reflection, Cell Genesys has presented claims corresponding precisely to Chappel's alternatives 1, 2, 3, 4, 5 and 6. These appear as Claims 105 - 111, as presented above, respectively. Cell Genesys has also presented Claim 112 which corresponds to and depends from Claim 110, but further recites that the cell in question was prepared through homologous recombination. This claim is presented since neither the Chappel disclosure nor the Skoultchi disclosure describes another way to "make" the cell lines so claimed.

Given the fact that homologous recombination was known to those of skill in the art, for other purposes, at the time the involved patent and application were filed, Cell Genesys submits that the current Count is sufficient, as the method of Count 1, coupled with the knowledge of those of skill in the art as of 1989 - 1990, would have rendered obvious, 35 U.S.C. 103, the cell line claims of Cell Genesys and ARS.

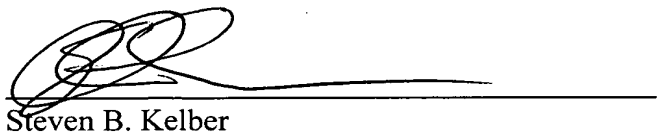
Pursuant to the guidance of the APJ, Cell Genesys sets forth, below, the claim terms advanced, and corresponding supporting disclosure, in a two column presentation form. Cell Genesys further notes that its claims are supported by two examples in the involved case, both of which involve amplification of the expression of a gene (for t-PA, page 12 - 14, and for EPO,

page 15 - 19) not normally expressed by the cell in question.

Accordingly, entry of the amendment, and designation of claims 105 - 112 as corresponding to Count 1, is respectfully requested.

Respectfully submitted,

PIPER RUDNICK LLP



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Claim 107. A method of causing a mammalian cell to express a gene of that cell's genome encoding a protein not normally expressed by said cell,	Page 3, l 12 - 14. Expression of mammalian proteins of interest is achieved by employing homologous recombination for integration of an amplifiable gene and other regulatory sequences in proximity to a gene of interest. Page 5, l 5- 6. The cells may not be expressing the gene of interest.
comprising inserting a DNA construct through homologous recombination into said genome of said cell in proximity to said gene,	Page 4, l. 8 - 11. The method employs homologous recombination in a host cell for integrating an amplifiable gene in the vicinity of a target gene, which gene encodes the protein of interest.
said construct comprising at least one of an amplifiable gene, other regulatory sequence, or both, and DNA homologous with DNA of a region of said genome in proximity to said gene,	Page 6, l. 3 - 7. For homologous recombination, constructs will be prepared where the amplifiable gene will be flanked on one or both sides with DNA homologous with the DNA of the target region,
whereby expression of said gene in said cell is caused to occur.	Page 10, l 34 - 35. If desired, amplification may be performed at this time by stressing the primary cells.....so that multi-copies of the target gene are obtained.

Claim 108. A method of causing a mammalian cell to increase the level of expression of a gene of that cell's genome encoding a protein normally expressed by said cell,	Page 3, l 12 - 14. Expression of mammalian proteins of interest is achieved by employing homologous recombination for integration of an amplifiable gene and other regulatory sequences in proximity to a gene of interest. Page 5, l 5- 6. The cells may be expressing the gene of interest.
comprising inserting a DNA construct through homologous recombination into said genome of said cell in proximity to said gene,	Page 4, l. 8 - 11. The method employs homologous recombination in a host cell for integrating an amplifiable gene in the vicinity of a target gene, which gene encodes the protein of interest.
said construct comprising at least one of an amplifiable gene, other regulatory sequence, or both, and DNA homologous with DNA of a region of said genome in proximity to said gene,	Page 6, l. 3 - 7. For homologous recombination, constructs will be prepared where the amplifiable gene will be flanked on one or both sides with DNA homologous with the DNA of the target region,
whereby expression of said gene in said cell is caused to occur.	Page 10, l 34 - 35. If desired, amplification may be performed at this time by stressing the primary cells.....so that multi-copies of the target gene are obtained. Page 3, l 17 - 19. The region comprising the amplifiable gene and the gene of interest may be amplified....Cells which produce the target protein at high and stable levels are expanded and used for expression of the target protein.

Claim 109. A method of causing a mammalian cell to express a gene of that cell's genome encoding a protein not normally expressed by said cell,	Page 3, l 12 - 14. Expression of mammalian proteins of interest is achieved by employing homologous recombination for integration of an amplifiable gene and other regulatory sequences in proximity to a gene of interest. Page 5, l 5- 6. The cells may not be expressing the gene of interest.
comprising inserting a DNA construct through homologous recombination into said genome of said cell in proximity to said gene,	Page 4, l. 8 - 11. The method employs homologous recombination in a host cell for integrating an amplifiable gene in the vicinity of a target gene, which gene encodes the protein of interest.
said construct comprising at least one of an amplifiable gene, other regulatory sequence, or both, and DNA homologous with DNA of a region of said genome in proximity to said gene,	Page 6, l. 3 - 7. For homologous recombination, constructs will be prepared where the amplifiable gene will be flanked on one or both sides with DNA homologous with the DNA of the target region,
whereby expression of said gene in said cell is caused to occur in said cell in which said DNA construct is incorporated .	Page 10, l 34 - 35. If desired, amplification may be performed at this time by stressing the primary cells.....so that multi-copies of the target gene are obtained. (emphasis supplied to show support for the claim term differentiating Claim 109 from Claims 107 and 108).

Claim 110. A cell capable of expressing a gene not normally expressed by that cell comprising heterologous DNA which comprises at least one of an amplifiable gene or a regulatory sequence,	Page 4, l 25 - 28. The resulting cell lines are screened for the production of the target protein..... Page 5, l 5 - 6. These cells may not be expressing the gene of interest.
inserted in said cell's genome in a region in the vicinity of said gene, whereby said gene may be amplified and expressed.	Page 3, l 12 - 17. Expression of mammalian proteins of interest is achieved by integration of an amplifiable gene and other regulatory sequences in proximity to a gene of interest without interruption of the production of a proper transcript. Page 3, l 24 - 26. Cells which produce the target protein at high and stable levels are expanded and used for expression of the target protein. Page 12, l 3 - 6. Thus protein production will be increased at least 1.5 fold from expression from a single copy, usually at least 3 fold, preferably at least 5 fold.

Claim 111. A cell capable of expressing a gene at levels higher than that normally expressed by that cell line,	Page 4, l 25 - 28. The resulting cell lines are screened for the production of the target protein..... Page 5, l 5 - 6. These cells may be expressing the gene of interest. Page 12, l 3 - 6. Thus protein production will be increased at least 1.5 fold from expression from a single copy, usually at least 3 fold, preferably at least 5 fold.
comprising heterologous DNA which comprises at least one of an amplifiable gene or a regulatory sequence,	Pag 3, l 12 - 17. Expression of mammalian proteins of interest is achieved by....
inserted in said cell's genome in a region in the vicinity of said gene, whereby said gene may be amplified and expressed.	integration of an amplifiable gene and other regulatory sequences in proximity to a gene of interest without interruption of the production of a proper transcript. Page 3, l 24 - 26. Cells which produce the target protein at high and stable levels are expanded and used for expression of the target protein.

Claim 112. The cell of Claim 110, wherein said heterologous DNA has been inserted through the use of homologous recombination.

Page 3, l 12 - 16. Expression of mammalian proteins of interest is achieved by employing homologous recombination for integration of an amplifiable gene and other regulatory sequences in proximity to a gene of interest...